(FILE 'HOME' ENTERED AT 13:42:23 ON 08 FEB 2003)

FILE 'REGISTRY' ENTERED AT 13:42:28 ON 08 FEB 2003

L1	5022	S	CYCLOHEXANE DIMETHANOL?
L2	1	S	PCCD/CN
L3	7520	S	CYCLOHEXANE DICARBOXYLIC ACID?
L4	34	S	L3 AND CIS AND TRANS
L5	3073	S	105-08-8/CRN
L6	54	S	L5 AND (94-60-0/CRN OR 619-81-8/CRN OR 619-82-9/CRN)
L7	2	S	L6 AND 2/NC
L8	2708	S	L5 AND PES/PCT
L9	2424	S	L8 NOT TEREPHTHALIC?
L10	2291	S	L9 NOT ISOPHTHALIC?
L11	1530	S	L10 AND DICARBOXYLIC?

FILE 'CA' ENTERED AT 13:55:13 ON 08 FEB 2003

L12	51982	S	POLYCARBONATE? OR C08L069?/IC
L13	4	S	L12 AND L7
L14	1	S	L12 AND L6 NOT L13
L15	66	S	L12 AND L11 NOT (L13 OR L14)

ER 61 OF 66 CA COPYRIGHT 2003 ACS
AN 103:216398 CA
TI Ionizing radiation-resistant polymer compositions
IN Avakian, Roger W.
PA General Electric Co., USA
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM **C08L069-00**
ICS C08K005-00
ICA A61L002-08
CC 37-6 (Plastics Manufacture and Processing)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 152012	A2	19850821	EP 1985-100929	19850130
	EP 152012	A3	19860312		
	R: DE, FR, GB, IT, NL				
	JP 60192759	A2	19851001	JP 1985-23687	19850212
	US 4874783	A	19891017	US 1987-136606	19871222
	US 4876309	A	19891024	US 1987-136682	19871222
	US 4880853	A	19891114	US 1987-136607	19871222
	US 4880854	A	19891114	US 1987-136608	19871222
	US 4880855	A	19891114	US 1987-136609	19871222
	US 4882366	A	19891121	US 1987-136683	19871222
	US 4880850	A	19891114	US 1989-309050	19890207
	US 4939185	A	19900703	US 1989-396727	19890818
	US 4939186	A	19900703	US 1989-401533	19890830
	US 4996246	A	19910226	US 1989-424431	19891020
	US 4996248	A	19910226	US 1989-424489	19891020
	US 4996247	A	19910226	US 1989-424494	19891020
	US 4996244	A	19910226	US 1989-425618	19891020

PRAI	US 1984-579103	19840210
	US 1985-769103	19850826
	US 1985-769277	19850826
	US 1987-110159	19871016
	US 1987-136604	19871222
	US 1987-136606	19871222
	US 1987-136607	19871222
	US 1987-136608	19871222
	US 1987-136609	19871222
	US 1987-136682	19871222

AB Yellowing of arom. **polycarbonates** and their blends in radiation sterilization is suppressed by adding 0.05-2 phr stabilizer reacting rapidly with active species such as H or OH radicals or hydrated electrons. Thus, 50 parts bisphenol A **polycarbonate** [24936-68-3] was mixed with 50 parts copolyester [26124-27-6] (85:15:100 terephthalate-isophthalate-1,4-cyclohexanedimethanol), 0.2 part Good-rite 3125 (I) [34137-09-2], and 0.00102 part red and blue dyes. This blend, exposed to 5 Mrad gamma rays, had yellowing index 4.13, vs. 7.48 in the absence of I.
ST yellowing **polycarbonate** radiation stabilizer; polyester **polycarbonate** blend stabilizer; blend **polycarbonate** radiation stabilizer; gamma ray **polycarbonate** stabilizer
IT Poly

ER 60 OF 66 CA COPYRIGHT 2003 ACS
AN 104:6673 CA
TI Enhancing ionizing radiation resistance of normally susceptible polymers
IN Allen, Richard Brian; Avakian, Roger W.
PA General Electric Co., USA
SO Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM **C08L069-00**
ICS C08L067-02; A61L031-00; A61L029-00
ICA A61L002-08
ICI C08L069-00, C08L067-02; C08L067-02, C08L069-00
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 152825	A2	19850828	EP 1985-100931	19850130
	EP 152825	A3	19851002		
	EP 152825	B1	19890517		
	R: DE, FR, GB, IT, NL				
	JP 60199051	A2	19851008	JP 1985-23686	19850212
	JP 06035537	B4	19940511		
PRAI	US 1984-579102		19840210		

AB Arom. **polycarbonates**, poly(ester-carbonates), poly(sulfone-carbonates), and arom. polyesters are blended with polyesters or poly(sulfone-carbonates) for improving the ionizing radiation resistance when molded into medical products. For example, poly(bisphenol A carbonate) [24936-68-3] as base resin was mixed with 20% poly(carbonate-sulfone) and gamma-irradiated to 5.7 Mrads. The yellowing index was 21.49, in comparison to 42.34 for no additive, and the slope was 3.7 in comparison to 7.42 for no additive, indicating less yellowing.

ST **polycarbonate** polyarylate polysulfone; radiation resistance polymer blend

IT **Polycarbonates**
RL: USES (Uses)
(blends with polyesters or polysulfones, resistant to discoloration during sterilization by irradn.)

IT Discoloration prevention
(of transparent **polycarbonate** moldings during sterilization by irradn.)

IT Sterilization and Disinfection
(of transparent polymer moldings for medical use, by irradn., discoloration in)

IT Plastics, molded
RL: USES (Uses)
(**polycarbonate** blends with polyesters or polysulfones, resistant to discoloration during sterilization by irradn.)

IT Polyesters, uses and miscellaneous
RL:

L15 ANSWER 32 OF 66 CA COPYRIGHT 2003 ACS
AN 124:318654 CA
TI Dynamic mechanical and dielectric relaxation study of aliphatic polyester based blends
AU Stack, Gary M.; O'Reilly, J. M.
CS East Chemical Company, Kingsport, TN, 37662, USA
SO Polymeric Materials Science and Engineering (1993), 69, 4-5
CODEN: PMSEDG; ISSN: 0743-0515
PB American Chemical Society
DT Journal
LA English
CC 37-5 (Plastics Manufacture and Processing)
AB Mech. properties and dielec. relaxation were studied for blends of 1,4-cyclohexanedimethanol-1,4-cyclohexanedicarboxylic acid copolymer with bisphenol A **polycarbonate** or bisphenol A-isophthaloyl chloride-terephthaloyl chloride copolymer.
ST polyester blend mech property; dielec relaxation polyester blend; **polycarbonate** polyester blend property
IT Dielectric relaxation
(dynamic mech. and dielec. relaxation study of polyester-**polycarbonate** and polyester-polyester blends)
IT **Polycarbonates**, properties
Polyesters, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(dynamic mech. and dielec. relaxation study of polyester-**polycarbonate** and polyester-polyester blends)
IT Plastics
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(**polycarbonate**-polyester; dynamic mech. and dielec. relaxation study of polyester-**polycarbonate** and polyester-polyester blends)
IT 24936-68-3, Bisphenol A-carbonic acid copolymer, sru, properties
25037-45-0, Bisphenol A-carbonic acid copolymer 25639-68-3, Bisphenol A-isophthaloyl chloride-terephthaloyl chloride copolymer 29088-80-0, 1,4-Cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol copolymer, sru **29089-13-2**, 1,4-Cyclohexanedicarboxylic acid-1,4-cyclohexanedimethanol copolymer 39281-59-9, Bisphenol A-isophthaloyl chloride-terephthaloyl chloride copolymer, sru
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(dynamic mech. and dielec. relaxation study of polyester-**polycarbonate** and polyester-polyester blends)

L15 ANSWER 30 OF 66 CA COPYRIGHT 2003 ACS
AN 125:115964 CA
TI A free volume approach to the mechanical behavior of miscible **polycarbonate** blends
AU Hill, A. J.; Zipper, M. D.; Tant, M. R.; Stack, G. M.; Jordan, T. C.; Shutlz, A. R.
CS Fac. Eng., Monash Univ., Victoria, 3168, Australia
SO Journal of Physics: Condensed Matter (1996), 8(21), 3811-3827
CODEN: JCOMEL; ISSN: 0953-8984
PB Institute of Physics Publishing
DT Journal
LA English
CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 36
AB Compn.-dependent mech. properties and free vols. are compared for miscible, amorphous blends of bisphenol-A **polycarbonate** (PC) with (a) polyaryloxysiloxane (PAS), (b) a copolyester of 1,4-cyclohexanedimethanol and a mixt. of isophthalic and terephthalic acids (Eastar) and (c) an exptl. polyester of 1,4-cyclohexanedicarboxylic acid and 1,4-cyclohexanedimethanol (CDACD). The free vols. were measured by the positron annihilation lifetime spectroscopy (PALS) technique. The strength of specific interactions, as indicated by Tg data, is relatively weak in all of the blends. However, the fractional free vol. quantity measured by PALS (.tau.33I3) is less than additive in the polyester blends and is additive, or greater than additive in the PC-PAS blends. The mech. behavior of the blends can be rationalized in terms of the free vol. behavior. The polyester blends which lose free vol. (contract) on mixing exhibit higher than av. yield strengths and brittle impact responses. The PC-PAS blends which retain or gain free vol. on mixing exhibit av. yield strengths and av. ductile impact responses of the constituent polymers.
ST mech behavior miscible **polycarbonate** blend; arom polyester **polycarbonate** blend property; free vol mech behavior **polycarbonate** blend; polyaryloxysiloxane **polycarbonate** blend mech behavior
IT Siloxanes and Silicones, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(biphenylene, **polycarbonate** blends; compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)
IT Glass temperature and transition
(compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)
IT **Polycarbonates**, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)
IT Plastics
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(**polycarbonate** blends with polyesters and polyaryloxysiloxanes; compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)
IT Polyesters, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in

formulation); PRP (Properties); PROC (Process); USES (Uses)
(**polycarbonate** blends; compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)

IT Polyesters, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(arom., **polycarbonate** blends; compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)

IT Volume
(free, compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)

IT 24936-68-3, Bisphenol A **polycarbonate**, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(Makrolon 2608 and Lexan 141; compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)

IT 25037-45-0
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)

IT 26124-27-6, 1,4-Cyclohexanedimethanol-isophthalic acid-terephthalic acid copolymer 29088-80-0, 1,4-Cyclohexanedimethanol-1,4-cyclohexanedicarboxylic acid copolymer, sru **29089-13-2**, 1,4-Cyclohexanedimethanol-1,4-cyclohexanedicarboxylic acid copolymer 51910-62-4, 1,4-Cyclohexanedimethanol-isophthalic acid-terephthalic acid copolymer, sru 139321-71-4
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(**polycarbonate** blends; compn.-dependent mech. properties and free vols. in miscible **polycarbonate** blends)